CATALOGUE OF METEORITES, TEKTITES AND ASSOCIATED MATERIAL IN THE QUEENSLAND MUSEUM

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Catalogue of meteorite and related material held by the Queensland Museum lists 144 meteorites, 162 tektites and tektite bulk samples, 10 casts and 10 specimens of related material. □ *Meteorites, tektites, catalogue, Tenham, Glenormiston, Thunda, Gladstone #2, Queensland Museum.*

Peter Volk, Queensland Museum, PO Box 3300, South Brisbane, Queensland 4101, Australia; 2 November 1993.

Geology collections of the Queensland Museum (QM) were initiated in 1871 (Mather, 1986). However, the first meteorite accessioned was a slice of the Gibeon meteorite (D864) in 1916, and the first Queensland (Qld) meteorite the Glenormiston (D1291) in 1926. Major contributions of meteoritic material were made by the Geological Survey of Queensland (G.S.Q.) in 1979 and Mr. F.S. (Stan) Colliver in 1985.

Collection auditing by the author in 1993 has revealed a total holding of 144 meteorites, 162 tektites or bulk tektite fragment samples, 12 casts and 10 specimens of related material.

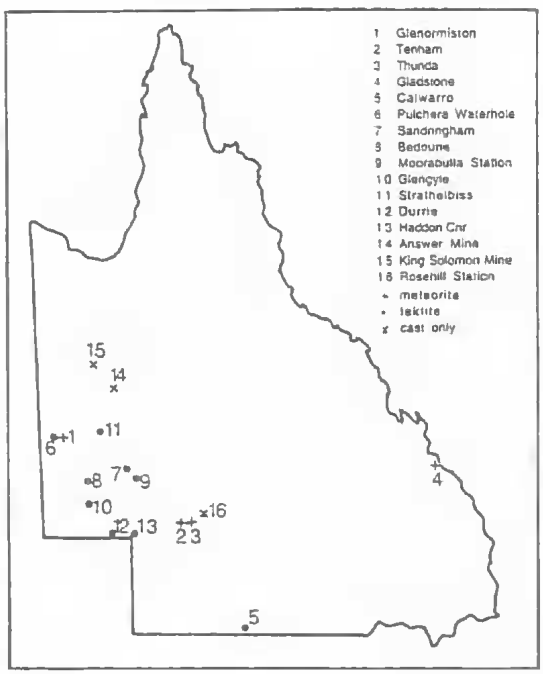

FIG. 1 Provenance of Queensland meteoric material held by the Queensland Museum.

QUEENSLAND MATERIAL
(Fig. 1)
METEORITES

D1291
Glenormiston Meteorite

TYPE
Medium octahedrite.

MATERIAL
FIND: Glenormiston, nr Boulia, Qld (22°54'S,138°43'E): main mass, 38.8kgs; four small pieces cut from main mass, 2.5g, 1.3g, 0.9g, 0.6g; shavings, heavily oxidised, 18.9g.

REFERENCE
Richards, (1930: 65-72, pls 3-8).

REMARKS
Purchased in 1926 from Mr. F. H. Story; sectioned for analysis; present location of the smaller part thus produced unknown.

D1592 , D4465
Tenham Meteorites

TYPE
Brecciated, olivine - hypersthene chondrite.

MATERIAL
FALL: Tenham Station, nr Ingella, Queensland (25°44'S 142°57'E), 1879. [Prior (1953) recorded "Spring" but QM records suggest that the fall took place earlier in 1879. Prior may have been referring to the boreal spring].

Weights of individual stones are given below; sectioned stones (S) are noted and the weight is the remaining piece. Missing stones (M) are indicated. Numbers refer to those given by Hodge-Smith (1939, pls. 10, 11). Letters refer to a set of ten stones, registered as D4465, donated to the Queensland Museum by the Geological Survey of Queensland in 1979 which are probably part of the set of fourteen stones loaned to the Geological Survey by Miss O. A. Hammond in 1940 and recorded as unlocatable (Brooks, Simmonds & Houston,1964).

1:2115.6; 2:1931.7; 3:639.5, S; 4;1768.8; 5:1671.0; 6:1272.8; 7:1258.6; 8:996.3; 9: M; 10: M; 11: 865.7; 12: 861.0; 13;831.2; 14:807.9; 15:762.2; 16:752.7; 17:724.8; 18:660.4; 19:612.2; 20:606.4; 21:612.0; 22: 582.3; 23:572.1; 24:603.1; 25:482.2; 26:473.7, 27:608.8; 28:316.8, S; 29:576.4; 30:491.6; 31:449.6; 32:433.9; 33:444.6; 34:407.8; 35:404.9; 36:399.1; 37;390.2; 38;375.0; 39:304.0; 40: M; 41: M; 42:353.7; 43:379.8; 44:354.2; 45:348.1; 46:352.0; 47:353.2; 48: M; 49;338.6; 50:306.9; 51;281.8; 52:262.1; 53:264.9; 54:256.7; 55:273.2; 56:276.8; 57:54.4, S; 58:243.9; 59:262.3; 60:252.6; 61;242.0; 62:235.3; 63:205.0; 64:219.4; 65:212.3; 66.217.4; 68:195.9; 69:217.3; 70:200.2; 71:200.4; 72:189.6; 73:184.2; 74:191.5; 75:196; 76:199.7; 77:198.8; 78:192.3; 79:180.4; 80;180.5; 81;184.7; 82:172.6; 83:162.0; 84:167.5; 85:159.4; 86:157.3; 87:157.8; 88:143.0; 89:163.6; 90:145.8; 91:149.8; 92:134.2; 93:132.5; 94:141.1; 95:121.6; 96:125.3; 97:122.9; 98:101.8; 99: M; 100:81.1; 101:84.4; 102:79.0; 103:88.0; 104:81.8; 105:79.8; 106:80.7; 107:87.5; 108:70.2; 109:69.2; 110.69.7; 111:74.1; 112:59.8; 113:54.8; 114:55.4; 115;59.7; 116;56.5; 117:54.9; 118:37.8; 119:48.6; 120:43.8; 121:37.2; 122:44.8; 123:24.3; 124:30.3; 125:21.9; 126:22.6; 127:14.5.

"Hammond" Stones - 'b':476.7; 'c':416.4; 'D':252.2; 'g':169.5; 'h':129.4; 'i':104.8; 'j':89.2; 'L':81.1; 'm':55.5; 'N':56.9.

REFERENCES

Brooks, Simmonds and Houston (1964); Hodge-Smith (1939) p. 25, pls X, XI; Spencer (1937).

REMARKS

Of 127 specimens illustrated by Hodge-Smith (1939, pls 10, 11), 121 are in the QM collection. Stones 9, 10, 40, 41, 48 and 99 are missing; stones 57, 28 and 3 have each been sectioned and half of each is missing; stone 57 was sectioned by Lovering, one piece retained by him; stone 28 was sectioned and one piece sent to H.H. Nininger; no record exists of the fate of half of stone 3. Of the six missing stones, 10 and 99 were transferred to the Geological Survey of Queensland; stones 40 and 41 were sent to either the University of Queensland or the G.S.Q. but records confuse each stone's destination; stones 48 and 9 are unaccounted for. One stone was sent to the American Museum of Natural History in exchange for a fragment of the Selma meteorite.

Other holdings of Tenham stones are in the British Museum, University of Queensland, and the Australian Museum. Total Tenham Stones in the QM collections: 131.

D1606
Gladstone Meteorite #1

TYPE

Coarsest octahedrite.

MATERIAL

FIND: Toondon Ck, 4 miles south of Gladstone, (23°54'S, 151°15'30"E), in 1912 or 1913: 42.4g slice, heavily varnished.

REFERENCES

Richards (1930: 66-67);Hodge-Smith (1939: 18); Prior (1953: 134); Simmonds (1964: 3, pl 3, fig.1).

REMARKS

The main mass is in the Field Museum of Natural History, Chicago. An analysis appears in Richards (1930) and a description and a picture of this slice in Simmonds (1964). Other holdings are Australian Museum, Sydney, American Museum of Natural History Museum, New York, United States National Museum, Washington (Prior,1953).

D5834
Thunda Meteorite

TYPE

Medium octahedrite.

MATERIAL

FIND: Thunda, Windorah, Qld (25°42'S, 143°3'E), pre 1881: 43.2g slice.

REFERENCES

Dunstan (1913: 178); Liversidge (1886: 73); Hodge-Smith (1939: 25); Prior (1953: 371).

REMARKS

Donated to the Queensland Museum by T.

Davis of London in 1981. Other holdings see Hodge-Smith (1939) and Prior (1953).

D13519
Gladstone Meteorite #2

TYPE
Coarsest octahedrite.

MATERIAL
FIND: 4.5 miles S. of Gladstone, QLD (23°54'30"S, 151°15'30"E): 1 piece, 17.6kg with cut and polished face; 1 box shavings, approx. 4.7kg.

REFERENCE
Simmonds (1964: 3-5 pls 1-3).

REMARKS
Simmonds (1964) suggested that Gladstone #1 and #2 were part of a multiple fall. The specimens were acquired from the G.S.Q.

QUEENSLAND TEKTITES (AUSTRALITES)

D2078
Australite

MATERIAL
Paroo River, Caiwarro, nr Eulo, Qld (28°42'S, 144°47'E): 2.5g, lens shape.

REMARKS
Donated by Mrs E.A. Morley, 14.3.1956. Found in gravel bed of river.

D3697, D3698, D3699, D3700
Australites

MATERIAL
Pulchera Waterhole, Mulligan River, Qld (23°56'S, 138°38'E): 5.7g, 0.5g (fragment), 6.6g, 1.8g respectively.

REMARKS
Donated by Mr R. Suter 28.10.1971.

D3701, D3702
Australites

MATERIAL
12 Mile Waterhole, Sandringham, Qld (approx. 29°03'S, 139°04'E): 1.8g, 4.3g respectively.

REMARKS
Donated by Mr R. Suter, 29.10.1971.

D3703
Australite

MATERIAL
Sandhills, Bedowric, Qld (25°00'S, 149°03'E): 4.6g.

REMARKS
Donated by Mr R. Suter, 29.10.1991.

D3704
Australite

MATERIAL
Moorabulla Waterhole, Sandringham, Qld (24°16'S, 140°51'E): 7.9g.

REMARKS
Donated by Mr R. Suter, 29.10.1971.

D3705
Australite

MATERIAL
Georgina River, Glengyle, Qld (24°47'S, 139° 35'E): 5.8g.

REMARKS
Donated by Mr R. Suter, 29.10.1971.

D3706
Australite

MATERIAL
Duck Ck Claypan, Bedowrie, Qld (approx. 25°00'S, 149°3'E): 13.3g.

REMARKS
Donated by Mr R. Suter, 29.10.1971.

D3707
Australite

MATERIAL
Sandhill, Strathelbiss, Qld (22°48'S, 140°01'E): 10.4g.

REMARKS
Donated by Mr R. Suter, 29.10.1971.

D3708 , D3709 , D3710, D3711, D3712, D3713, D3714, D3715, D3716, D3717, D3718, D3719
Australites

MATERIAL
Durrie Stn, between dune ridges SW Qld (25°57'S, 140°13'E): D3708, 14 round buttons, part flanged: 2.1, 2.8, 1.1, 2.4, 4.1, 2.2, 2.4, 3.5, 2.7, 1.5, 1.7, 1.7, 1.6, 0.6g; D3709, 24 round lenses: 1.1, 1.0, 1.1, 1.0, 1.5, 2.3, 1.9, 1.4, 3.5, 1.5, 1.3, 1.7, 1.9, 1.8, 2.8, 3.2, 3.3, 1.1, 0.9, 1.1, 1.1, 1.0, 1.2, 1.2g; D3710, 12 elongate forms, part flanged: 3.7, 3.0, 3.0, 2.2, 1.7, 1.8, 2.4, 2.3, 1.2, 0.8, 1.3, 1.5g; D3711, 27 cores: 2.8, 6.0, 2.2, 7.6, 7.3, 3.8, 3.5, 2.8, 2.2, 1.9, 5.3, 7.4, 9.1, 8.7, 5.3, 4.6, 3.1, 3.5, 3.9, 5.3, 2.3, 3.0, 2.8, 5.8, 4.6g (1 specimen missing); D3712, 12 flanged fragments: 1.4, 0.7, 0.9, 1.0, 0.8, 0.5, 0.8, 1.6, 1.2, 1.5, 0.5, 0.4g; D3713, 4 elongate tears: 3.5, 3.7, 4.8, 2.0g;D3714, 5 broken cores: 1.8, 3.2, 2.7, 1.9, 1.8g;D3715, 1 blown out lens: 2.1g;D3716, 7 micro forms, part flanged: 0.3, 0.7, 0.6, 0.4, 0.4, 0.3, 0.9g; D3717, 10 forms spalling: 2.2, 1.3, 5.2, 3.3, 2.5, 2.3, 1.9, 4.7, 3.3, 3.1g; D3718, 7 elongate forms: 10.1, 6.2, 10.2, 3.2, 10.7, 1.7, 6.7g;D3719, 12 nondescript forms: 2.3, 0.9, 1.1, 1.2, 1.9, 0.5, 0.6, 0.3, 1.0, 1.9, 1.2, 1.2g.

REMARKS
Donated by Mr G. Hume, 29.10.1971.

D3720
Australites

MATERIAL
Haddon Cnr, SW Qld (26°02'S, 141°01'E): bulk sample - over 317.1g. [A small amount of this material is on loan and was not available for weighing].

REMARKS
Aboriginal artefacts and flakes chipped from Australites from Aboriginal site. Donated by G. Hume, 29.10.1971.

QUEENSLAND MATERIAL
CASTS

D3729
"Answer" meteorite

MATERIAL
ORIGINAL FIND: Old Camp, nr Answer Mine, S of Selwyn, Qld, Mr. J. Finch, 16 .6.1970.

REFERENCE
Houston (1971:484, pls 2,3.).

REMARKS
This cast is in poor condition, damaged and chipped. Houston (1971) stated that the original meteorite was returned to the owner after analysis.

D3730
"King Solomon" meteorite

MATERIAL
ORIGINAL FIND: 100 yards from King Solomon Mine, N of Mary Kathleen, NW Qld.

REFERENCE
Houston (1971:482, pl. 1.).

REMARKS
This specimen is slightly chipped and showing shrinkage cracks. Houston (1971) stated that the original meteorite was returned to the owner after analysis.

D13520 , D13549
Gladstone meteorite #2

REMARKS

These casts were taken before sectioning of the original. D13520 is massively damaged on one face; D13549 is in reasonable condition, having only minor damage. D13520 was donated by the G.S.Q. No record of donor of D13549 exists, though it almost certainly from the same source.

D13053
"Siderite"

MATERIAL
ORIGINAL FIND: Rosehill Station, about 1½ mls E of Retreat Hmstd, 3 mls S of Barcoo River, nr Cheviott Range, SW Qld: 2 casts, in good condition.

REMARKS
Original meteorite is recorded as being in the possession of Mr Jack Arden of "Akary" on Neave River, Charleville. There appear to be no references to this specimen. Considering the proximity of this site to Thunda, it is possible that the Thunda fall was multiple and that this meteorite was part of that fall.

NON- QUEENSLAND MATERIAL METEORITES

D864
Gibeon Meteorite

TYPE
Fine octahedrite.

MATERIAL
Find: Amalia Farm, nr Gibeon, SW Africa (25.5°S, 18°E): 1 slice, 818g (10x19x0.5cm).

REFERENCE
Prior (1953:131,132).

REMARKS
Shows Widmanstatten figures, troilite nodules and flow structure.

D2185
Aerolite

TYPE
Chondrite.

MATERIAL
FIND: Dimmitt, Texas, U.S.A. (34° 10'N, 102°10'W): 3 slices, 33.5g, 20.7g, 11.1g.

REFERENCE
Prior (1953:104).

REMARKS
Acquired by exchange with H.H. Ninninger, American Meteorite Museum, 23.7.1959.

D2186, D2296
Toluca Meteorite

TYPE
Medium octahedrite.

MATERIAL
FIND: Xiquipilco, Mexico (19°34'N, 99°34'W): D2186, 37g; D2296, 385g.

REFERENCE
Prior (1953:374).

REMARKS
Shows schriebersite inclusion and Widmanstatten figures. Sectioned in three directions. D2186 acquired by exchange with H.H. Ninninger, American Meteorite Museum,23.7.1959.

D2272
Selma Meteorite

TYPE
Olivine - bronzite spherical chondrite.

MATERIAL
FIND: Dallas County, Alabama, U.S.A. (32°24'N, 87°0'W):852.7g.

REFERENCE
Prior (1953:340,341).

REMARKS
Slab section, showing cracking and fracturing, with edges starting to break off main mass. It is recorded that this specimen was obtained from the American Museum of Natural History (AMNH3856) in exchange for one of the Tenham meteorites.

D8550
Meteoric Iron

MATERIAL
Unrecorded: two pieces, 18.7g, 1.6g.

D13040
Henbury Meteorite

TYPE
Medium octahedrite.

MATERIAL
FIND: About 100 mls S of Alice Springs on Henbury Station.(24°34'S, 133°10'E): two pieces, 11.0, 5.5g.

REFERENCE
Prior (1953:151,152).

REMARKS
Donated by Mr R.B. Brown.

D1522
Henbury Meteorite #7

TYPE
Medium octahedrite.

MATERIAL
FIND: Henbury, Finke River, Central Australia. (24°34'S, 133°10'E): 43.5kg.

REFERENCE
Prior (1953:151,152).

REMARKS
Donated by R. Bedford, Kyancutta.

D1527
Meteorite "Schrapnel"

MATERIAL
Henbury, Central Australia (24°34'S, 133°10'E).

REFERENCE
Prior (1953:151-152).

REMARKS
Seven fragments torn from crater meteorite.

D17060
Metallic Meteorite

MATERIAL
Unknown location: 339.1g.

REMARKS
The specimen shows similar characteristics to other pieces of the Henbury meteorite in our collection and may be from that location. This piece was donated by Mr. F. S. Colliver.

TEKTITES AND AUSTRALITES

D1649
Australites

MATERIAL
Nullabor Plain, W.A.: six specimens.

REMARKS
Collected(?) by Mr A.E. Baker.

D2187
Tektite

MATERIAL
South Vietnam: 13.2g.

REMARKS
Obtained by exchange with H.H. Ninninger, American Meteorite Museum.

D3690
Australite

MATERIAL
Myrtle Springs, nr Maree, South Australia: 15.3g.

REMARKS
Donated by D.F. Roder.

D13041
Australite

MATERIAL
60 miles S.W. of Finke Siding, N.T.: 12.9g.

D13518
Australites

MATERIAL
Boulder, W.A.: five specimens, 6.5, 5.5, 6.1, 5.7, 3.0g.

REMARKS
Three lenses, two elongate.

CASTS

D20
Cowra Siderite

MATERIAL
ORIGINAL FIND: Junction of Burrowa and Lachlan Rivers, Cowra District (Hodge-Smith, 1939).

REMARKS
Obtained through exchange with the Australian Museum, Sydney. Specimen in good condition.

D21
Bingera Siderite (Bingera No. 1)

MATERIAL
ORIGINAL FIND: Bingera, N.S.W.

REMARKS
Obtained through exchange with the Australian Museum, Sydney. Specimen in good condition.

D22
Barraba Siderite (Bingera No. 3)

MATERIAL
FIND: Between Barraba and Bingera, N.S.W.

REMARKS
Obtained through exchange with the Australian Museum, Sydney. The Barraba meteorite is a known synonym of Bingera No. 3 (Hodge-Smith, 1939).

D24
Mt Browne Aerolite

MATERIAL
FALL: 9.30 a.m. 17.07.1902; Mt. Browne, Co. Evelyn, N.S.W.

REMARKS
Obtained through exchange with the Australian Museum, Sydney. Showing significant paint loss on one face; otherwise in good condition.

D133
Roebourne Meteorite

MATERIAL
FIND: Alluvial plains 200 miles S.E. of Roebourne, W.A.

REMARKS
Donated by the West Australian Museum.

D433
Barratta Aerolite (Barrata No. 1)

MATERIAL
FIND: Barratta Station, via Denilquin, N.S.W.

REMARKS
Obtained through exchange with the Australian Museum, Sydney.

D434
Narraburra Siderite

MATERIAL
FIND: Narraburra Ck (= Yeo Yeo Ck) nr Temora, N.S.W.

REMARKS
Obtained through exchange with the Australian Museum, Sydney.

RELATED MATERIAL

D1524

MATERIAL
Outside of west rim of main crater, Henbury, Central Australia. (24°34'S, 133°10'E): five bombs of melted country rock.

REFERENCE
Prior (1953: 151, 152).

REMARKS
Obtained through exchange with the Kyancutta Museum, South Australia.

D1525

MATERIAL
1/2 mile E of Main Crater, Henbury, Central Australia (24°34'S, 133°10'E): silica glass, impregnated with *Fe* and *Ni*.

REFERENCE
Prior (1953: 151, 152).

REMARKS
In drops and coating pebbles. Obtained through exchange with the Kyancutta Museum, South Australia.

D1526

MATERIAL
Henbury, Central Australia. (24°34'S, 133°10'E): six shale balls and associated fragments.

REFERENCE
Prior (1953: 151, 152).

REMARKS
Produced by subsurface weathering of iron fragments.

D2167, D2168, D2181

MATERIAL
Arizona Meteorite Crater, U.S.A. (35°3'N, 111°2'W): meteorite condensation sphereoids.

REFERENCE
Prior (1953: 62, 63).

REMARKS
Obtained through exchange with H.H. Nininger. D2167 and D2181 are each one small bottle of the spheroids. D1268 has some spheroids displayed on a microscope slide against a white background.

D2182, D2183, D2184
Impactite

MATERIAL
Arizona Meteorite Crater, U.S.A. (35°3'N, 111°2'W): three specimens.

REFERENCE
Prior (1953: 62, 63).

REMARKS
Formed from dolomitic, arenaceous, Kaibab limestone.

D13042

MATERIAL
Wabar (or Wabur) Meteor Crater, Rub 'al Khali, Saudi Arabia (21°29'N, 50°40'E): black and white glass, 1.9g.

REFERENCE
Prior (1953: 396).

LITERATURE CITED

BROOKS, J.H., SIMMONDS, N.A.H. & HOUSTON, B.R. 1964. Recent investigations of the Tenham meteorite shower. Queensland Geological Survey Publication 320: 7-12.

DUNSTAN, B. 1913. 'Queensland mineral index and guide'. Queensland Geolgical Survey Publication 241. (Department of Mines: Brisbane).

HODGE-SMITH, T. 1939. Australian meteorites. Memoirs of the Australian Museum 7: 1-84.

HOUSTON, B.R. 1971. Two meteorites from Northwest Queensland. Qucensland Government Mining Journal, December 1971: 482-486.

LIVERSIDGE, A. 1886. Metallic meteorite, Queensland. Proceedings of the Royal Society of New South Wales 20: 73.

MATHER, P. 1986. (ed.), 'A time for a museum. The history of the Queensland Museum 1862-1986'. Memoirs of the Queensland Museum 24: 1-365.

PRIOR, G. T. 1953. 'Catalogue of mcteorites'. (British Museum of Natural History: London).

RICHARDS, H.C. 1930. The Glenormiston Meteorite. Memoirs of the Queensland Museum 10: 65-72.

SIMMONDS, N. A. H, 1964. A new meteorite from the Gladstone district. Publications of the Geological Survey of Queensland 320: plate 3 #1.

SPENCER, L. J. 1937. The Tenham (Queensland) meteoritic shower of 1879. Mincralogical Magazine 24 (156): 437-452.